Appendix B.1 DOCUMENTATION STANDARDS

A. General

The standards for data format standards and naming contained in this chapter shall be used in preparation of the contract drawings and other submitted documents. These standards generally describe various technical features and requirements of drawings and specific information that must be included on the drawings but is not intended to be a complete list of all features. The A/E shall show all the information necessary to be consistent with those generally recognized by the construction trades and consistent with the representations as found in Graphic Standards by Ramsey Sleeper.

B. CAD Drawing Requirements

1. General

All drawings shall be prepared in accordance with this guide, USCG COMMANDANT INSTRUCTION 11000.1, Section 7e. (dated June 24, 1996) the USCG Application and Standards Manual, Technical Report CADD-97 (dated June 1997).

2. CADD Standards

All drawing for Schematic design phases, and beyond must be produced using the Coast Guard CE-CADD Version 6.11c1 standards in conjunction with AutoCAD Release 14. The AutoCAD Release 14 ".DWG" format will be the only file format acceptable. The CE-CADD software and manual are publicly available for downloading from the USCG Civil Engineering Technology Center. The address is:

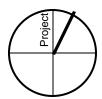
www.uscg.mil/mlclant/cetc

The A-E shall be responsible for the drawing format and documentation submittal of all project sub-consultants.

a. Exceptions.

North Arrows.

Use a cross hair type north arrow showing both compass north and project north. *This symbol is not available in the CE-CADD package*. Use the following example. Each plan view must include a north arrow (Site & Vicinity plans, Floor Plans, Roof Plans, etc.).



2. Section & Detail References.

Section and detail reference markers shall be a three-part symbol as shown below. *This symbol is not available in the CE-CADD package*.



3. Layering.

Layering per the U.S. National CAD Standard (formally AIA CAD Layering Standard) shall also be acceptable.

4. Drawing File Names.

Do not use the CE-CADD file naming convention. Use the following file naming convention for all submitted drawings:

Project Number _ Sheet Number

Examples: 13X02123_A5.dwg

13X02123 A12.dwg

Use underscores to separate project number from sheet number. Dashes, dots, tildes & etc. will not be accepted.

b. Sheet Borders & Title Blocks.

The use of CE-CADD sheet borders & title blocks is mandatory. Borders (ANSI A through ANSI E sizes) can be accessed through the CE-CADD software or by downloading from the FD&CC Pacific web site. FD&CC Pacific uses title block attributes to populate a drawing database, the information must be correct and consistent. DO NOT "RENAME" OR "EXPLODE" THE SHEET BORDER, this will cause the attribute information to be corrupted.

Contact the project EIC for the correct title block format & information. Files and instructions can be found on the FD&CC Pacific Web site.

c. Sheet Naming.

Use only the single character discipline designator as shown on page 21 of the CE-CADD Manual. Do not use dashes between the discipline identifier and the sheet number.







Note: For large projects, an alternative naming system may be used to easily insert additional sheets if necessary. Contact the EIC for more information.

C. Specifications

Written specifications shall be provided in MS Word format (.doc) and conform to the following requirements:

- a. Each submitted file shall contain one specification only. One file to each specification.
- b. Specification sections shall follow the NAVFAC numbering system.
- c. Provide a file named "Index" listing all sections used.
- d. Individual file naming will conform to the **File Naming Standards** in section C.
- e. Each page includes a centered <u>footer</u> that contains the project number, section number and page. Example:

13X01234 09250-1

D. Government Use of Files

All CAD drawing files will be made available to the Government at any time during the duration of the contract upon request.

E. Submission Format for Electronic Files

At the conclusion of each project phase (or as requested by the Project EIC) the A-E shall submit electronic documentation, with transmittal, in one single three ring binder to the EIC, as follows:

a. All drawing files as they appear in the submitted printed form on CD-ROM disk in a plastic sleeve. External references, if used, must be bound to the parent file before submittal. Each drawing file will be organized so that the entire sheet can be plotted in one operation. The CD disk shall be labeled with project name, project number, design

status (schematic, final, record, etc.) and submittal date. "Zip" tapes will not be accepted.

- b. 8 1/2" x 11" sheet(s) index indicating drawing list & file names.
- c. 8 1/2" x 11" print of each drawing in the submittal.
- d. Clearly mark the binder on its front panel with project name, project number, design status (Schematic, Final, Record...) and submittal date. An 8 1/2" x 11" print of the title sheet is acceptable. Mark the binder side panel with project name and design status only.
- e. For Schematic and Final design submittals one set of documentation is required.
- f. For Record (as-built) drawing submittals two sets of documentation are required.

F. File Naming Standards

1. General

All electronic files produced under this contract will be named with in the following convention.

Project Number _ file description

Examples: 13X02123_costs.xls

13X02123_boringlog.doc 13X02123_sitephoto.jpg 13X02123_materials.pdf

Use underscore ONLY to separate project number from sheet number. Dashes, dots, tildes & etc. will not be accepted.

G. Acceptable File Formats

The following formats are acceptable for submitted files under this contract. Other file types may be permitted with written permission from the Project EIC.

- a. MS Word .DOC = General correspondence, specifications, meeting minutes, etc.
- b. MS Excel .XLS = Spreadsheets.
- c. MS Powerpoint .PPT = Presentations.
- d. MS Project .MPP = Project scheduling.
- e. MS Access .MDB = Database.

- f. Adobe Acrobat .PFD = Vendor / product information, code & standards (ANSI, ASTM, SMACMA, etc) information.
- g. AutoCAD .DWG = Drawings.
- h. AutoCAD .DWF = Drawing viewer.
- i. .JPG = Photos.
- j. .TIF = Scanned images.
- k. .ZIP = File compression & consolidation (use the Zip executable .EXE for large number of files).